Evans: Attachment 4

FAUQUIER COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT

THIRD FLOOR - COURT AND OFFICE BUILDING $40\ \mathrm{CULPEPER}\ \mathrm{STREET}$

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DATE: April 10, 2003

TO: Robert C. Counts, Assistant Chief of Planning

Deirdre B. Clark, Senior Planner

FROM: Danny Hatch, County Soil Scientist

SUBJECT: The Reserve At Glanaman (Formerly Airlie Estates) Llewellyn J. Evans Trust PP02-S-12

After reviewing the Preliminary Plat stamped 3/13/03 the following comments are made:

• The present lot layout is much better than previous plats.

- On sheet 4 of 5 place proposed home sites on each lot and number lots.
- Sheet 4 of 5 should be renamed "Preliminary Soil Information"
- All recommendations in 7/11/03 staff report for Final Soil Map still apply.

Central Water Supply (SE02-S-23)

This office did receive an acceptable Hydrogeological Study proposal and we witnessed part of the pump down test. As of this date I have not seen the results of these test and there affect on neighboring properties.

DATE: July 11, 2002

TO: Elizabeth A. Cook, Chief of Planning

Deirdre B. Clark, Senior Planner

FROM: Danny Hatch, County Soil Scientist

SUBJECT: Llewellyn J. Evans trust PP02-S-12

A Type I Soil Map was completed on the Evans parcel on November, 1999. This involved walking over the entire property, boring auger holes and drafting the different soil types and cultural features onto the base map. As a result of this detailed soil map, a waiver of the preliminary soil report as required by the County Subdivision Ordinance is recommended. Being very familiar with this parcel, the following comments are made.

Recommendations are noted first due to importance, with details following. Recommendations 1-4 should be forwarded to the Planning Commission in the staff report as conditions of approval prior to final plat acceptance.

Recommendations

- 1. On sheet 4 of 4 there were mistakes made when the Type I soil map was digitized and printed at the 1 inch = 100 foot scale. These errors need to be corrected, in addition to stating the source of soil information and the original scale (Type 1 Soil Map via Fauquier County Soil Scientist Office, Original Scale 1 inch = 400 feet). Spot symbols from the Type 1 Soil Map need to be added along with the Spot Symbols Legend (i.e. perennial drain, intermittent drain, rock pile, dump site, very stony). This must be done before any revision are made to the present design of this proposed subdivision. Also show proposed drainfield sites on these lots.
- 2. The final soil map shall have a Virginia Certified Professional Soil Scientist (CPSS) adjust the Type I Soil Map soil lines onto the final plat. This needs to be done in the field and checked for any additional soil information to be added to the final scale plat map.

3. A signature block shall be placed on this plat for the CPSS to sign which states:

Preliminary Soils Information Provided by the Fauquier County Soil Scientist Office via a Type I Soil Map (1"=400') Dated	
This Virginia Certified Professional Soil Scientist has field reviewed and adjusted the preliminary soil information onto the final plat (1"=???") and certifies that this is the Best Available Soils Information to Date for Lots 1-??.	
Va. Certified Professional Soil Scientist CPSS #3401-	DATE

- 4. Interpretive information from the Type I Soil Map for each mapping unit shown on the above plat shall be placed on the same soil map. Also, a Spot Symbols Legend shall be placed on the plat map to identify spot symbols.
- 5. The three statements under <u>Home Sites and Road Construction</u> shall be placed on the same plat map.
- 6. This plat will be filed in the front office of Community Development and used exclusively for obtaining soils information for this proposed subdivision.

7. This map needs to be submitted to the Soil Scientist Office before final plat approval is made.

Lot Layout

- 1. Lots 17 and 24 do not show a proposed drainfield area.
- 2. Lot 20 has part of the drainfield off of the property.
- 3. The lot layout needs to be reconsidered in order to eliminate odd shaped lots and to provide a pad site for the proposed home that is not in drainage ways which would make them susceptible to wet basements.

Home Sites and Road Construction

Due to landscape position (drainageways) and high seasonal water tables, the following statement needs to be placed on the final plat to be placed in the front office of Community Development:
 "The County recommends that no below grade basements be constructed on soil mapping units 12A, 15B, 17B, and 482B due to wetness unless the foundation drainage system of the structure is designed by a Virginia Licensed Professional Engineer".

The foundation drainlines should be daylighted for gravity flow on all structures. This soils information will need to be provided by the applicant to the Building Department at the time of application.

- 2. Several soil mapping units are shallow to bedrock. The following statement needs to be placed on the final plat. "The County recommends that before road or home construction begins in the soil mapping units 140B, 140C, 140D, 340B, 340C, and 340D a site specific evaluation be conducted so that shallow to bedrock area are identified. These areas may require blasting if deep cuts or excavation is done."
- 3. There are some areas of Shrink-swell soils on this property. The following statement needs to be placed on the final working plat: "Structures placed on mapping units 482B will require a geotechnical study and the foundation will have be designed by a Virginia Licensed Professional Engineer in accordance with the Uniform Statewide Building Code".
 - This soils information will need to be provided by the applicant to the Building Department at the time of application.
- 4. Once these drainfield areas are identified and approved by the Health Department, the following statement shall be placed on the final drainfield plat: "Before a home is started the builder shall mark the drainfield area off and not disturb it during construction".

Wetlands

There may be small areas of wetlands in the 12A mapping unit. A wetland delineation study will need to be done in order to determine if the road crossing and wet pond will affect these areas

Floodplain Crossing (SE02-S-21)

The floodplain crossing mapping unit 12A will need to be properly engineered due to high seasonal water table and low bearing capacity. This soil type does not have evidence of as frequent or long duration of flooding as do other floodplain soils that occur on larger streams or rivers.

Central Water Supply (SE02-S-23)

This area is underlain by a basic bedrock (Greenstone) and can be massive and dense. Due to lack of fractures and problems the County has had in other places, the Hydro study is very important in order to determine if there is enough deep aquifer to sustain this proposed subdivision.